Figure Captions

Figure 1: 1988–1987 June/July/August (JJA) Sea Level Pressure (in hPa) and surface to 800 hPa averaged wind vectors (in m sec⁻¹) from the GEOS–1 Reanalysis.

Figure 2: 1988–1987 June/July/August (JJA) Surface Air Temperature (in K) from the GEOS–1 Reanalysis. The region inside the rectangle over North America from 23–61 North and 129–66 West is allowed to freely vary as described in the LBOX experiment. Negative differences are surrounded by a dash.

Figure 3a: 1988–1987 June/July/August (JJA) 200 hPa streamfunction (in units of 10¹⁰ kg sec⁻¹) from: top) Case C1 CTRL; and bottom) GEOS–1 Reanalysis.

Figure 3b: Same as Figure 3a, only for 500 hPa streamfunction.

Figure 4a: 1988–1987 June/July/August (JJA) precipitation (in mm day⁻¹) from: top) Case C1 CTRL; and bottom) GPCP Version 2. Negative differences are surrounded by a dash.

Figure 4b: 1988–1987 June/July/August (JJA) Sea Level Pressure (in hPa) and surface to 800 hPa averaged wind vectors (in m sec⁻¹) from: top) Case C1 CTRL; and bottom) GEOS–1 Reanalysis.

Figure 4c: 1988–1987 June/July/August (JJA) evaporation (in mm day⁻¹) from: top) Case C1 CTRL; and bottom) GSWP offline. Negative differences are surrounded by a dash.

Figure 4d: Same as Figure 4b, only for surface air temperature (in K). Negative differences are surrounded by a dash.

Figure 5: Same as Figure 4, only for Case C2 WIND.

Figure 6: Same as Figure 4, only for Case C3 SOIL.

Figure 7: Same as Figure 4, only for Case C4 BOTH.

Figure 8: Same as Figure 4, only for Case C5 LBOX.

Figure 9: Same as Figure 4, only for Case C6 VEGI.

Figure 10a: 1988–1987 June/July/August (JJA) precipitation (in mm day⁻¹) from: upper right) Case C1 CTRL; lower right) GPCP Version 2; and left & center) four individual members from Case C1 CTRL ensemble. Negative differences are surrounded by a dash.

Figure 10b: Same as Figure 10a, only for Case C4 BOTH.

Figure 10c: Same as Figure 10a, only for Case C5 LBOX.

Figure 11a: 1988 monthly and area-averaged precipitation (in mm day⁻¹) from Cases C1

through C6 and GPCP Version 2 (solid line) for the central Plains area of 30-50 North

and 100-85 West. The ensemble average is shown with the long dash, and the individual

ensemble members are shown with the short dash.

Figure 11b: Same as Figure 11a, only for 1987.

Figure 12a: 1988 daily and area-averaged root zone soil wetness from Cases C1 through C6

and GSWP offline (solid line) for the Illinois area of 38–41 North and 92–88 West. The

ensemble average is shown with the long dash, and the individual ensemble members are

shown with the short dash.

Figure 12b: Same as Figure 12a, only for 1987.

Table Caption

Table 1: 1988–1987 monthly and June/July/August (JJA) precipitation correlation between GEOS precipitation for all cases and GPCP Version 2 for the North American region of 23-61N; 129-66W.

	June	July	August	JJA
Case 1 - CTRL	0.170	0.020	0.140	0.171
Case 2 - WIND	0.592	0.332	0.429	0.558
Case 3 - SOIL	0.175	0.357	0.180	0.245
Case 4 - BOTH	0.609	0.356	0.448	0.546
Case 5 - LBOX	0.369	0.288	0.353	0.417
Case 6 - VEGI	0.389	0.283	0.395	0.421
Case 7 - OPPO	0.386	0.304	0.403	0.444